WHAT IS CLAIMED IS:

- A compound containing uretdione groups, having a molar fraction of isocyanurate structures, based on the sum of uretdione groups and isocyanurate groups, of not more than 10%, wherein the compound is obtained by dimerizing aliphatic and/or cycloaliphatic isocyanates containing exclusively secondary and/or tertiary isocyanate groups.
- The compound according to Claim 1, wherein the compound is obtained by
 dimerizing aliphatic and/or cycloaliphatic diisocyanates containing
 exclusively secondary and/or tertiary isocyanate groups.
 - The compound according to Claim 2, wherein the diisocyanates comprise 4,4'-diisocyanatodicyclohexylmethane.
 - 4. A process for dimerizing compounds containing exclusively secondary and/or tertiary isocyanate groups comprising dimerizing said compounds in the presence of a saltlike oligomerization catalyst containing one or both of 1,2,3-triazolate structures and 1,2,4-triazolate structures in the anion of the catalyst.
 - 5. The process according to Claim 4, wherein the anion of the saltlike oligomerization catalyst contains one or both triazolate structures of the general formulas (I) and (II)

wherein

15

20

25

5

10

÷

- R¹, R², R³ and R⁴ are independently identical or different radicals selected from a hydrogen atom; a halogen atom selected from fluorine, chlorine and bromine; a nitro group; a saturated or unsaturated aliphatic or cycloaliphatic radical; an optionally substituted aromatic or araliphatic radical containing up to 20 carbon atoms and optionally up to 3 heteroatoms selected from oxygen, sulphur and nitrogen and optionally substituted by halogen atoms or nitro groups and where R³ and R⁴ in formula (II) together with the carbon atoms of the 1,2,3-triazolate five-membered ring also form optionally fused rings having 3 to 6 carbon atoms.
- 6. The process according to Claim 5, wherein the anion of the saltlike oligomerization catalyst compound contains the triazolate structures of general formula (I), wherein R¹ and R² are identical or different radicals selected from a hydrogen atom; a halogen atom selected from fluorine, chlorine and bromine; a nitro group; a saturated aliphatic or cycloaliphatic radical or an optionally substituted aromatic or araliphatic radical containing up to 12 carbon atoms and optionally up to 3 heteroatoms selected from oxygen, sulphur and nitrogen and can optionally be substituted by halogen atoms or nitro groups.
- The process according to Claim 5, wherein the anion of the saltlike oligomerization catalyst compound contains the triazolate structure of general formula (II), wherein R³ and R⁴ are identical or different radicals
 selected from a hydrogen atom; a halogen atom selected from fluorine, chlorine and bromine; a nitro group; a saturated or unsaturated aliphatic or cycloaliphatic radical or an optionally substituted aromatic or araliphatic radical containing up to 12 carbon atoms and optionally up to 3 heteroatoms selected from oxygen, sulphur and nitrogen and can optionally be substituted by halogen atoms or nitro groups; and together with the

carbon atoms of the 1,2,3-triazolate five-membered ring also form optionally fused rings having 3 to 6 carbon atoms.

- 8. The process according to Claim 5, wherein the anion of the saltlike
 5 oligomerization catalystcomprises one or more salts of compounds selected
 from 1,2,4-triazole, 1,2,3-triazole and1,2,3-benzotriazole, and mixtures
 thereof.
- 9. The process according to Claim 5, wherein the oligomerization catalyst contain as cations one or more compounds selected from alkali metal ions, monovalent ammonium ions, and phosphonium cations of the general formula (III)

$$\begin{array}{c}
R^{5} \\
\downarrow \oplus \\
R^{6} - E - R^{8} \\
\downarrow \\
R^{7}
\end{array}$$
(III)

15 wherein

E is nitrogen or phosphorus, and

R⁵, R⁶, R⁷ and R⁸ are identical or different radicals selected from saturated aliphatic or cycloaliphatic radicals and optionally substituted aromatic or araliphatic radicals having up to 18 carbon atoms.

10. A polyurethane polymer prepared by reacting the compounds containing uretdione groups according to Claim 1 with a polyol in a polyaddition process.

Le A 35 907-US

11. A method of preparing a polyurethane polymer comprising reacting the compounds containing uretdione groups according to Claim 1 in a polyaddition process.

- 28 -

- 5 12. A method of preparing a powder coating composition comprising adding the polyurethane polymers according to Claim 10, as a crosslinking component, to the powder coating composition.
- 13. A powder coating composition comprising the polyurethane polymers according to Claim 10 as a crosslinking component.